

Chesterfield County, Virginia Department of Building Inspection

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WILLIAM D. DUPLER Building Official

ADVISORY

Selected changes from the 2005 National Electrical Code and the 2006 International Residential Code and Technical Amendments from the Virginia Uniform Statewide Building Code, effective for permits applied for on or after May 1, 2008:

Article 210.8 (A)(7)/ E3802.7 Laundry, Utility & Wet Bar Sinks

G.F.C.I. Protection: All Receptacles within 6 Ft. of sinks.

Article 210.8 (C)/ E3802.9

Boat Hoists

G.F.C.I. Protection required for all 125 volt 15 and 20 ampere outlets and hardwired boat hoists serving dwelling units.

Article 210.12 (B)/ E3802.12

A.F.C.I.'s Dwelling Units

Series & Parallel Rated: All devices installed after Jan. 1st 2008 shall be listed for both.

Article 210.52 (C)/ E3801.4.1

Counter Tops

<u>Spaces Behind Sinks & Ranges:</u> Receptacles are required and count as the required receptacles to serve other countertop spaces.

Article 210.52(D)/ E3801.6

Bathroom Receptacles

Not required in wall or partition if installed on side or face of the basin cabinet.

Article 250.32 (A)/ E 3507.3

Buildings or Structures ,<u>Branch Circuits:</u> Exception: Multi-wire Branch Circuit shall be considered a single branch circuit and grounding electrodes are not required.

Article 250.50 / E3508.1

Grounding Electrode System

Concrete Encased Electrode: If present shall be required. Exception: not required for existing buildings.

Article 300.18(A)/ E3702.3.2

Raceway Installations

<u>Exception:</u> Short sections of raceways used to contain conductors or cable assemblies for protection from physical damage shall not be required to be installed complete between outlet, junction, or splicing points. permitted.

Article 314.16(B)(1)/ E3805.12.2

Outlet, Device, Pull, & Junction Boxes

Box Fill: Looped unbroken conductors twice the required length shall be counted twice.

Article 334.15 (B)/ E3702.4

Nonmetallic-Sheathed Cables

<u>Protection from physical damage:</u> Added rigid metal conduit, intermediate metal conduit or other approved means.

Article 404.9 (B)/ E3901.11.1

Provisions for General Use

Snap Switches

Exception to (B) Grounding: Metal plates allowed with G.F.C.I. protection when no grounding means exists.

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Article 406.8(B)(1)/ E3902.10

Receptacles in Damp or Wet

Locations

Wet Locations: 15 and 20 ampere, 125 and 250 volt receptacles installed in a wet location shall have an enclosure that is weatherproof whether or not the attachment plug cap is inserted.

The word "OUTDOOR" was removed to include wet locations found indoors.

Article 408.4 / E3606.2

Switchboards and Panelboards

<u>Circuit Directory and Identification:</u> Every circuit shall be legibly labeled for its clear use and specific purpose.

Article 410.14(B) / E3904.3

Access to Boxes

Electric-discharge luminaires surface mounted over concealed outlet, pull and junction boxes and designed not to be supported solely by the outlet box shall be provided with suitable opening in the back of the luminaire to provide access to the wiring in the box.

Article 422.31 (B) / E4001.5

Appliances

Disconnecting Means: Locking device to remain in place with or without the lock installed.

Article 680.12/ E4103.3

Swimming Pools

Disconnecting Means: Now required to be "Readily Accessible" for all utilization equipment.

Article 680.23(A)(2)

Underwater Lighting Fixtures

- New listing requirements for transformers used for underwater lighting fixtures:
- Shall be listed as a swimming pool or spa transformer. Article 680.23(B)(6) Servicing (Wet Niche Luminaires)
- Wet niche luminaires shall be removable for re-lamping or normal maintenance. Luminaires must be installed in such a manner that personnel can reach the luminaire for re-lamping, maintenance, or inspection while on the deck or equivalently dry location.

Article 680.23(F)(1)

Wiring Methods

Underwater Luminaires

Where installed within a building, type MC cable has been added as an approved branch circuit wiring method for wet-niche and dry-niche luminaires.

Article 680.26(C)

Equipotential Bonding Grid

Conductive Material Pools

Paved Decks

The equipotential bonding grid shall conform to the contours of the pool and shall extend within or under "paved" walking surfaces for 3' horizontally beyond the inside walls of the pool.

Nonconductive Material Pools

Paved Decks

The equipotential bonding grid shall conform to the top edge contour of the pool only and shall extend within or under "paved" walking surfaces for 3' horizontally beyond the inside walls of the pool.

Article 680.26(C)(3)

Alternate Means

- If equipotential bonding grid is to be placed under the paved walking surface then you must use the Alternate Means of grid construction described in 680.26(C)(3).
- The Grid shall be constructed of minimum #8 bare solid copper conductors and shall be bonded to each other at all points of crossing. Connections shall be made as required by 680.26(D).
- The grid shall cover the contour of the pool and the pool deck extending 3' horizontally from the inside walls of the pool. The grid conductors shall be arranged in a uniformly spaced 12"x 12" pattern.